

# MARINE INFORMATION NOTICE

## EU Regulation on Monitoring, Reporting and Verification (MRV) of CO<sub>2</sub> emissions from ships - upcoming deadlines

*The scope of the Marine Information Notice publication is to provide the Shipping Sector with information relevant to RINA, its organization, initiatives and services as well as to disseminate information of a general nature which in RINA view may be of interest. The information provided does not intend to be exhaustive and is given for reference only.*

### 1. Introduction

On 1 July 2015, the “REGULATION (EU) 2015/757 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 29 April 2015 ON THE MONITORING, REPORTING AND VERIFICATION OF CARBON DIOXIDE EMISSIONS FROM MARITIME TRANSPORT, and amending Directive 2009/16/EC” came into force.

RINA Marine Information Notice n.96 (May 2015) provided an overview of the EU Regulation’s main requirements. Additional technical information on this issue has been provided by Technical Bulletin no. 8 “Focus on air emissions”.

In order to keep the owners informed on the issue, this new MNO has been published, summarizing the upcoming deadlines.

### 2. Application

The EU Regulation is applicable to all ships above 5.000 GT regardless of their flag, port of registry or home port, except warships, naval auxiliaries, fish-catching or fish-processing ships, wooden ships of a primitive build, ships not propelled by mechanical means, and government ships used for non-commercial purposes.

### 3. Upcoming deadlines

#### 3.1 Monitoring Plan

By 31 August 2017, companies must submit for approval to their verifier a monitoring plan for each ship falling in the above application and reporting conditions, indicating the methodology chosen to monitor and report emissions and other relevant information.

#### 3.2 Monitoring and reporting requirements

From 1 January 2018, fuel consumption and carbon emissions on all voyages to, from and between EU ports while the ship is at sea as well as at berth must be monitored.

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From 2019, by 30 April of each year, companies shall submit to the Commission and to the authorities of the flag States, an emission report concerning the total CO<sub>2</sub> emissions during the entire reporting period for each ship under their responsibility, which has been verified as satisfactory by a verifier.

Other relevant information such as distance travelled, time spent at sea, details on the cargo carried, transport work and average energy efficiency expressed in fuel consumption or carbon emissions per distance or per transport work are to be monitored and reported.

Data shall be reported per-voyage and on an annual basis as well, exemption to the reporting on per voyage basis is given for those ships which perform more than 300 voyages in a reporting period according to their schedule calling an EU port or departing from an EU port.

#### 4. Monitoring methodologies

Four acceptable fuel consumption monitoring methodologies are applicable:

1. Bunker Fuel Delivery Note (BDN) and periodic stock-takes of fuel tanks
2. Bunker fuel tank monitoring on board
3. Flow meters for applicable combustion processes
4. Direct emissions measurements

A combination of these methodologies may be applied on each ship if it results in an improvement in the accuracy of monitoring.

#### 5. Required Monitoring Plan contents

European Commission will issue very soon a standard template that the companies have to use to prepare their Monitoring Plans (one for each ship). The plan will indicate the method chosen to monitor and report CO<sub>2</sub>-emissions as well as any other relevant information.

For ships falling under the scope of the Regulation for the first time after 31 August 2017, the company must submit a monitoring plan to its verifier without undue delay and no later than two months after each ship's first call in a port under the jurisdiction of a Member State.

The monitoring plan shall contain at least the following elements:

1. the identification and type of the ship, including its name, its IMO identification number, its port of registry or home port, and the name of the ship owner
2. the name of the company and the address, telephone and e-mail details of a contact person
3. a description of the following CO<sub>2</sub> emission sources on board the ship: main engines, auxiliary engines, gas turbines, boilers and inert gas generators, and the fuel types used

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4. a description of the procedures, systems and responsibilities used to update the list of CO<sub>2</sub> emission sources over the reporting period
5. a description of the procedures used to monitor the completeness of the list of voyages
6. a description of the procedures for monitoring the fuel consumption of the ship, including:
  - the method chosen from among those set out in Annex I for calculating the fuel consumption of each CO<sub>2</sub> emission source, including, where applicable, a description of the measuring equipment used
  - the procedures for the measurement of fuel uplifts and fuel in tanks, a description of the measuring equipment used and the procedures for recording, retrieving, transmitting and storing information regarding measurements, as applicable
  - the method chosen for the determination of density, where applicable
  - a procedure to ensure that the total uncertainty of fuel measurements is consistent with the requirements of this Regulation, where possible referring to national laws, clauses in customer contracts or fuel supplier accuracy standards
7. single emission factors used for each fuel type, or in the case of alternative fuels, the methodologies for determining the emission factors, including the methodology for sampling, methods of analysis and a description of the laboratories used, with the ISO 17025 accreditation of those laboratories, if any
8. a description of the procedures used for determining activity data per voyage, including:
  - the procedures, responsibilities and data sources for determining and recording the distance
  - the procedures, responsibilities, formulae and data sources for determining and recording the cargo carried and the number of passengers, as applicable
  - the procedures, responsibilities, formulae and data sources for determining and recording the time spent at sea between the port of departure and the port of arrival
9. a description of the method to be used to determine surrogate data for closing data gaps
10. a revision record sheet to record all the details of the revision history

The monitoring plan may also contain information on the ice class of the ship and/or the procedures, responsibilities, formulae and data sources for determining and recording the distance travelled and the time spent at sea when navigating through ice.

## 6. RINA's activities

RINA SERVICES S.p.A. is conducting pre-verification GAP-Analysis audits for shipping companies across the world. Conducting an audit of company's procedures and data against the requirements of the Regulation will enable to close possible gaps and achieve well in time compliance to the Regulation.

Upon positive results of the audit RINA can issue a statement of compliance of the monitoring plan to the EU Regulation 2015/757.

## 7. Next steps

New Marine Information Notices will be issued on this topic upon publication of the Delegating Acts from EU, containing the template of the Monitoring Plan and the Guidelines for the correct filling out of the Emission Report.

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